

PULL STRIP FOR FORMING HOLES

CLAIMS

1. A device for use for forming an aperture in structure formed from unsolidified material that is capable of solidifying to a hard state, comprising:

a strand of flexible material that is helically coiled in the form of a preformed elongated tubular member having adjacent coils extending between opposite ends of said preformed member removably bonded together and having a given outside diameter such that said preformed member may be embedded in unsolidified material with one of said ends extending at least close to a surface of said material such that when said material solidifies, said one end of said strand may be pulled to break the bonds between adjacent coils of said strand to remove said strand from said solidified material to form an aperture in said solidified material from the surface.

2. The device of claim 1, wherein:

said strand is formed of flexible plastic material helically coiled to form said preformed member.

3. The device of claim 1, wherein:

said preformed member has an aperture extending from said one end through the other of said ends with a cap coupled to said one end of said strand partially covering said aperture at said one end.
4. The device of claim 3, comprising:

said strand is formed of flexible plastic material helically coiled to form said preformed member.
5. The device of claim 3, wherein:

gripping means coupled to said cap to facilitate removal of said preformed member from said solidified material.
6. The device of claim 5, wherein:

said strand is formed of flexible plastic material helically coiled to form said preformed member.
7. The device of claim 1, wherein:

said strand is helically coiled to form said preformed member with an aperture extending from said one end to the other of said ends with said aperture at said other end being closed.

8. A tubular member formed from a plastic material and having two opposite ends with a tubular sidewall comprising an inner surface defining a central aperture extending between said opposite ends and an outer surface comprising a helical coil extending between said opposite ends defining a plurality of adjacent coils with said sidewall between adjacent coils at said inner surface being thin enough to be broken by pulling on one end of said tubular member while at least a portion of said tubular member spaced from said one end is held stationary to pull adjacent coils apart such that said tubular member may be embedded in unsolidified material with said one end extending at least close to a surface of said material such that when said material solidifies, said one end of said member may be pulled to break said side wall at said inner surface between adjacent coils to pull said member from said solidified material to form an aperture in said solid material from the surface.
9. The tubular member of claim 8, wherein:
said sidewall between adjacent coils at said inner surface has radial dimensions much less than the radial dimensions of said coils from said inner surface.

10. A structure, comprising:
 - a concrete material having at least one surface;
 - an elongated helical tubular member having adjacent coils that contact one another, the member having two opposite ends;
 - the member located in the concrete material such that one of the ends is located close to the surface.
11. The structure of claim 10 further comprising a support in contact with the member, the support extending to a side of the concrete material.
12. The structure of claim 11 wherein the support further comprises one or more wires coupled to an outside of the member.
13. The structure of claim 11 wherein the support further comprises a mandrel inserted into the member and coupled to a wall along the surface of the concrete material.
14. The structure of claim 11 further comprising a plate for coupling the mandrel to the wall.

15. A method of forming an aperture into structure formed from unsolidified material that is capable of solidifying to a hard state comprising the steps of:

embedding an elongated preformed tubular member having two opposite ends, in said unsolidified material with one of said ends located close to a surface of said material,

said preformed member comprises a strand of flexible material that is helically coiled and the coils being in contact with adjacent coils and having a given outside diameter,

after said material solidifies, pulling said one end of said strand to separate adjacent coils of said strand to remove said strand from said solidified material to form an aperture in said solidified material from said surface.

16. The method of claim 15, wherein:

said preformed member is embedded in said material when in an unsolidified state by pushing the other of said ends of said preformed member into said unsolidified material until said one end of said preformed member is located close to said surface of said material.

17. The method of claim 15, wherein:

said preformed member is embedded in said material when in an unsolidified state by attaching said preformed member to a support member, and

placing said unsolidified material around said preformed member with said one end located close to said surface of said material.

18. The method of claim 15, wherein:

said material of said structure comprises concrete.

19. The method of claim 15 wherein said solidified material forms a first slab of solidified material, said method comprising the steps of:

inserting and securing a metal rod into said aperture with an outer end of said rod extending out of said solidified material, and

embedding said outer end of said rod with unsolidified material which solidifies to form a second slab of solidified material with said first and second slabs of solidified material being joined by said embedded rod.

20. A method of providing an anchor in a concrete material, comprising the steps of:

providing a tubular member that comprises a strand of flexible material with two opposite ends, the material being helically coiled and with each coil being in contact with adjacent coils, the tubular member having an outside thread pattern;

embedding the tubular member in the unsolidified concrete material with one of the ends located close to a surface of the concrete material,

after the concrete material solidifies, pulling on the one end to separate adjacent coils and remove the strand from the concrete material, leaving an aperture in the concrete material from the surface, the aperture having the thread pattern;

inserting an anchor member into the aperture, the anchor member having the thread pattern.

21. The method of claim 20 further comprising the step of lifting the concrete material by way of the anchor member.

22. The method of claim 20 further comprising the step of securing a worker safety system to the anchor member.